Contribution ID: **97** Type: **not specified**

Dirty laundry –A data quality journey from ENBIS Active session to nationwide system redesign for industrial textile management

At ENBIS-24 in Leuven, we brought an emerging challenge to the ENBIS Active Session: a large industrial laundry operator managing millions of textile items across multiple sites wanted to understand and extend textile lifespans as part of a circular economy strategy using existing operational data on textile discarding events. The key advice we received —to not trust the data from the outset —proved transformative.
Rather than proceeding directly to lifetime modeling, our project team invested substantial effort in exploratory data visualization and knowledge building through interviews with operational staff. This exploration revealed that the registration system fundamentally conflated two distinct decisions: whether to invoice the customer and why the textile was actually discarded. Staff routinely selected codes to achieve correct billing rather than to document quality defects, rendering the data unusable for lifetime analysis.
This discovery led to the co-development of a new process to cleanly separate billing decisions from quality assessments. The workflow was iteratively refined through workshops, pilot testing, and continuous dialogue with operational staff across the organization, before being deployed nationwide across all sites.
This talk traces the full journey: from seeking advice at the ENBIS Active Session, through the project that uncovered and solved a fundamental data quality problem, to a validated nationwide system —demonstrating how statistical thinking and early skepticism toward data quality can reshape an entire organizational data infrastructure.

Special/ Invited session

Classification

Mainly application

Keywords

Data Quality, Statistical Engineering, Exploratory Data Analysis

Primary authors: Dr NIELSEN, Morten Bormann (Danish Technological Institute); HECK, Robert (Danish Technological Institute)

Presenters: Dr NIELSEN, Morten Bormann (Danish Technological Institute); HECK, Robert (Danish Technological Institute)

Track Classification: Data Analytics and Data Science: Case Studies